The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JYOTIRMOY PAUL, JEFF BARTON, ANIT CHAKRABORTY, and SIVA DIRISALA

Appeal No. 2006-1299
Application No. 09/631,884

ON BRIEF

Before THOMAS, RUGGIERO, and BLANKENSHIP, Administrative Patent Judges.

BLANKENSHIP, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-4, 6-10, 12-17, 19, 20, and 23-28, which are all the claims remaining in the application.

We affirm.

BACKGROUND

The invention relates to a method and system for allowing users of mobile devices to communicate with database applications. Representative claim 1 is reproduced below.

> 1. A method for allowing multiple types of clients to use a database application without hard-coding presentation logic for each of the multiple types of clients into the database application, the method comprising the steps of:
>
> prior to providing data from the database application to a particular client, performing the steps of:
>
> converting the data that is to be transmitted from the database application to the particular client into an XML output without regard to the device type of the particular client by:
>
> identifying a data type to which the data corresponds, wherein the data type reflects a type of the data that is read out of the database;
>
> selecting from a plurality of document type definitions, a document type definition associated with said data type; and
>
> converting the data to XML output based on said selected document type definition;
>
> identifying the particular client device type of the particular client;
>
> wherein sets of metadata are each associated with a client device type of a plurality of client device types and indicates how to convert said XML output to output for the client device type;
>
> selecting, based on the particular client device type, a particular set of metadata from among the sets of metadata;
>
> reading the particular set of metadata; and
>
> based on the particular set of metadata, converting the XML output to

output for the particular client device type; and

providing the output for the particular client device type to the particular client.

The examiner relies on the following references:

Bayeh et al. (Bayeh)	6,012,098	Jan. 4, 2000 (filed Feb. 23, 1998)
Hill et al. (Hill)	6,023,714	Feb. 8, 2000 (filed Apr. 24, 1997)
Monday	US 6,480,860 B1	Nov. 12, 2002 (filed Feb. 11, 1999)
Boag et al. (Boag)	US 6,589,291 B1	Jul. 8, 2003 (filed Apr. 8, 1999)

Karanjit Siyan (Siyan), Netware TCP/IP and NFS, copyright 1994 by New Riders Publishing, pp. 11, 94, and 103.[1]

Claims 1-3, 6-10, 12-16, 19, 20, and 23-28 stand rejected under 35 U.S.C. § 103 as being unpatentable over Bayeh, Boag, Monday, and Hill.

Claims 4 and 17 stand rejected under 35 U.S.C. § 103 as being unpatentable over Bayeh, Boag, Monday, Hill, and Siyan.

We refer to the Final Rejection (mailed Apr. 14, 2005) and the Examiner's Answer (mailed Nov. 2, 2005) for a statement of the examiner's position and to the Brief (filed Sep. 19, 2005) and the Reply Brief (filed Jan. 3, 2006) for appellants' position with respect to the claims which stand rejected.

[1] The citation information, which does not appear on our file copy of the reference's pages, is taken from a PTO-892 mailed by the examiner.

OPINION

The examiner sets forth findings in support of the § 103 rejection of claim 1 at pages 4 to 9 of the Answer. Appellants argue there is no suggestion or motivation to combine the references because the combination of Bayeh with Boag would change the principle of operation of Bayeh, and would render Bayeh unsatisfactory for its intended purpose.

As shown in Figure 4 of Bayeh, the reference describes "servlets," such as a data servlet and a rendering servlet, running on server 82'.

> According to the preferred embodiment, the rendering servlet must parse the XML data stream, and reformat it into HTML. This is necessary because browsers, by convention, expect to receive data that has been formatted with HTML. As discussed previously, this parsing process requires two types of data input: the XML data stream, and style sheet information.

Bayeh col. 11, ll. 34-40.

In appellants' view, the above-quoted section of Bayeh indicating that the rendering servlet must parse the XML data stream is inconsistent with the Boag system. As summarized at column 4, lines 29 through 35 of Boag, Boag's system determines whether a client device is capable of applying the selected style sheets. If the client device has the capability, the selected style sheets are applied at the client device rather than at the server.

The examiner responds, in the Answer, that Bayeh is not relied upon for the described details of the rendering servlet, but for its teachings relating to the data servlet.

We find that Bayeh teaches isolating the function of the rendering servlet from the function of the data servlet, for the advantages of structured, modular programming. Col. 8, ll. 35-37. The specific teaching is consistent with the more general teaching of isolating the code that implements data retrieval from the code that renders the retrieved data into a presentation format. Col. 1, ll. 13-61; col. 3, ll. 5-7.

Bayeh does teach that the rendering servlet of the preferred embodiment must parse the XML data stream and reformat it into HTML. The reason that the rendering servlet "must" do so is that, according to Bayeh, browsers by convention expect to receive data that has been formatted into HTML. Boag, however, teaches that some browsers running on a client device can support style sheet processing; e.g., style sheets for rendering content at the client device. Col. 7, l. 58 - col. 8, l. 13; col. 10, ll. 42-62; Fig. 3. In the case that a browser can support style sheet processing, style sheets may be stored in a local cache on the Web server or proxy. A client device can subsequently fetch the cached style sheet and apply the style sheets at the client. Col. 11, ll. 7-11 and 49-54; Fig. 3.

At the time of the instant invention the artisan was cognizant that not all browsers necessarily expected or required receiving data in HTML format, contrary to the implication of Bayeh if considered alone. We find that the proposed combination would

not change the principle of operation of Bayeh, nor render Bayeh unsatisfactory for its intended purpose, at least for the reason that Bayeh teaches separability of the database query and rendering functions. The artisan would have recognized that a system such as that described by Bayeh was not limited to the requirements of the disclosed details of the rendering servlet. Boag teaches dynamically determining the most appropriate location for applying style sheets (e.g., Abstract; col. 3, ll. 27-38), which is not contrary to the principle of operation of Bayeh. Nor would the teaching render Bayeh unsatisfactory for its intended purpose of isolating information retrieval logic from information presentation formatting logic.

Appellants quote column 9, lines 18 through 24 of Bayeh, which indicates that when minimizing the extent of disruption to existing software by localizing all changes to code running on servers, the "minimized disruption further maximizes" the "advantages of the preferred embodiment." This advantage requires, according to appellants, that the rendering servlet must convert the XML data stream into an HTML stream by applying a style sheet. (Brief at 9-10.) However, appellants fail to explain why Boag's teachings relating to a server determining where best to apply style sheets does not also localize all changes to code running on servers. In either case (Bayeh or Boag), there is no need for changes in a client's browser code when implementing the respective server software. In either case, a client's browser code is predetermined, regardless of whether a server always, or not always, converts the data stream provided to the client.

We have considered all of appellants' arguments -- including the allegation at page 4 of the Reply Brief that the artisan, having the teachings of the references before him, would conclude that Bayeh's system could not be improved -- but we are not persuaded of error in the examiner's finding of a motivation to combine the references, when the references are considered in their entirety as by one skilled in the art.[2] We thus sustain the rejection of claims 1-3, 6, 7, 12-16, 19, 20, and 23-28 under 35 U.S.C. § 103 as being unpatentable over Bayeh, Boag, Monday, and Hill.

Appellants have argued independent claim 8 separately. Claims 9 and 10 depend from claim 8. Appellants submit that the references fails to describe the features of (1) a plurality of mark-up languages that are each associated with one or more client device types, and (2) selecting, based on a client device type to which the output is to be sent, a second mark-up language of said plurality of mark-up languages. (Brief at 13-15; Reply Brief at 7-9.)

The examiner refers to column 2 of Boag as teaching a plurality of mark-up languages, such as HTML (HyperText Markup Language) or WML (Wireless Markup Language). While the reference does not appear to expressly describe selecting a mark-up language appropriate for a particular device type, Boag does at least suggest that the system deals with documents encoded in a plurality of mark-up languages.

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[2] The presence or absence of a motivation to combine references in an obviousness determination is a pure question of fact. In re Gartside, 203 F.3d 1305, 1316, 53 USPQ2d 1769, 1776 (Fed. Cir. 2000).

The reference indicates (col. 8, ll. 4-8) that the "XML documents" described therein are representative of documents encoded in a plurality of mark-up languages. In our view, one skilled in the art would have appreciated that the mark-up language for a document to be delivered to a particular client should be selected based on the client device type. Otherwise, a client device might not properly process a document, if in a mark-up language appropriate for a different device type.

We thus find adequate support in Boag for the examiner's findings in controversy with respect to the subject matter of instant claim 8. Being not persuaded of error in the rejection, we sustain the examiner's rejection of claims 8-10 under 35 U.S.C. § 103 as being unpatentable over Bayeh, Boag, Monday, and Hill.

We also sustain the rejection of claims 4 and 17 under 35 U.S.C. § 103 as being unpatentable over Bayeh, Boag, Monday, Hill, and Siyan, as appellants have relied on the arguments presented in the other ground of rejection that we have sustained.

CONCLUSION

The rejection of claims 1-4, 6-10, 12-17, 19, 20, and 23-28 under 35 U.S.C. § 103 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a). See 37 CFR § 1.136(a)(1)(iv).

AFFIRMED

JAMES D. THOMAS)
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